



Photos courtesy of High Performance Homes

“We have lived here for almost a year now, and it’s been the most comfortable home I’ve ever lived in... We are happy clients, living in our ‘Happily Ever After Home.’” *Home owner*



PROJECT DATA

- **Layout:** 3 bdrm, 2.5 bath, 2 fl, 3,748 ft²
- **Climate:** IECC 5A, cold
- **Completed:** August 2016
- **Category:** custom for buyer

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 35, with PV 16
- **Projected Annual Energy Costs:** without PV \$1,300, with PV \$700
- **Projected Annual Energy Cost Savings:** (vs typical new homes) without PV \$2,400, with PV \$3,000
- **Annual Energy Savings:** without PV 45 MBtu; with PV 65 MBtu

CONTACT

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KEY FEATURES

- **Walls:** R-23 6.5" SIPs above grade, 4.5" SIP at band joist plus 1" closed-cell foam; R-19 batt in floor joists; house wrap; stone or stucco with 2" EPS foam.
- **Roof:** Composite shingle over 15# felt, ice-and-water shield in valleys and at eaves, kickout and 5" sidewall flashing; all downspouts drain to 10' pipe with pop-ups.
- **Attic:** R-53 vented attic with 1" closed-cell spray foam + R-49 blown cellulose on ceiling deck.
- **Foundation:** Basement, pre-cast concrete walls with integral R-21.3 rigid foam; R-10 XPS under slab.
- **Windows:** Double-pane low-e, argon-filled, U=0.25, SHGC=0.29.
- **Air Sealing:** 1.1 ACH 50.
- **Ventilation:** Timer-controlled exhaust fans.
- **HVAC:** Ground-source heat pump, 5.6 COP, 20.3 EER; all ducts in conditioned space.
- **Hot Water:** 50-gal desuperheater on ground-source heat pump + .93 EF 50-gal electric water heater.
- **Lighting:** 95% LED, 5% CFL.
- **Appliances:** ENERGY STAR dishwasher, refrigerator, and bath fans.
- **Solar:** 4.9-kW PV roofing shingles.
- **Water Conservation:** Recirculating pump; low-flow fixtures.
- **Energy Management System:** Internet energy monitoring of solar.
- **Other:** No-/low-VOC paint, adhesives, and cabinetry; motion sensor exhaust fans in garage.

